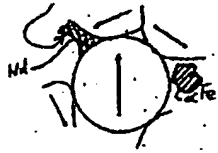


Figure 1

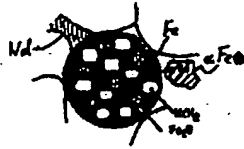
Nd-rich phase Phase transition



(1) Grain of the parent alloy:

Arrows indicate the crystallographic orientation of the c-axis

Reverse phase transition

(2) Mixture of RH_2 , Fe and Fe_2B :

Arrows denote the crystallographic orientation of the c-axis of the Fe_2B phase (orientation of Fe_2B and parent alloy show a good correspondence)



(3) Recombinant microstructure:

Arrows indicate crystallographic orientation of the c-axis of $R_2Fe_{14}BH_x$ phase (orientation of the $R_2Fe_{14}BH_x$ phases matches)

Figure 2 Crystallographic orientation (state of the art)

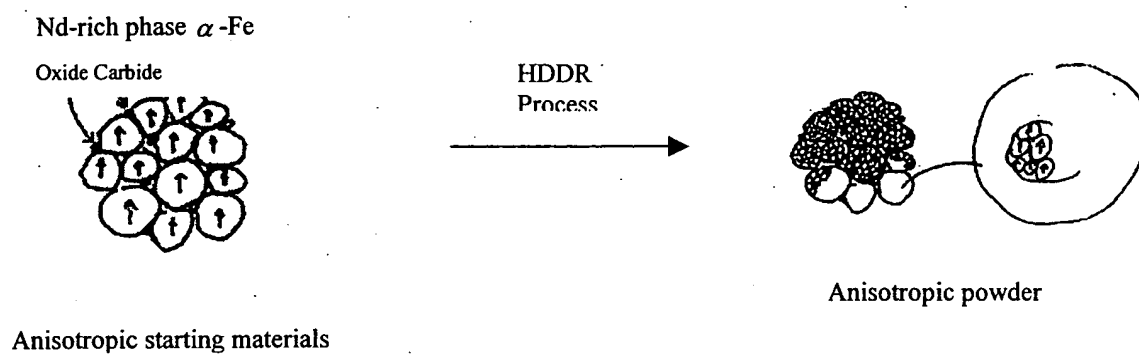


Figure 3